RECOMMENDED READING

Real Estate Mathematics: Applied Analytics and Quantitative Methods for Private Real Estate Investment

by David J. Lynn, Ph.D., CRE, with Tim Wang, Ph.D. (©2011, PEI, 250 pages)

REVIEWED BY WILLIAM P.J. McCARTHY, CRE, FRICS, CPM

THERE IS AN EXCELLENT NEW ADDITION to the already crowded collection of texts on real estate math and its applications entitled *Real Estate Mathematics: Applied Analytics and Quantitative Methods for Private Real Estate Investment.* The Counselors of Real Estate® can take pride in the fact that five Counselors contributed excellent chapters to it, and one, David J. Lynn, also served as co-editor.

Real Estate Mathematics, published last year by the Private Equity Institute (PEI) presents in nineteen detailed, yet succinct chapters what its subtitle states: an applied analytical and quantitative method for private real estate investment. The publication of this book is timely, as is its structure and format. For real estate markets to improve and to avoid the nonsense and corruption that led to the global meltdown in markets will require a return to solid real estate analysis and the application of tested real estate mathematics, calculations and measurements. These standards, used by skilled and ethical practitioners, are the best safeguard against bad practices, behavior and results.

More than 25 leading real estate experts contributed to this publication. These include our five fellow CREs whose chapter contributions give a flavour to both the quality of the writers and the text as a whole.

David J. Lynn, CRE, managing director, senior strategist and generalist portfolio manager, Clarion Partners, New York City, co-edited the book and wrote the chapter on "Distressed Debt Investing" (co-authored with fellow editor Tim Wang). This chapter is an excellent primer to the characteristics of distressed debt, especially in light of recent developments and practices. The authors provide practical investment strategies that capitalize on the increasing amounts of distressed debt on banks' balance sheets. The chapter illustrates how either loan-to-own or hold-to-maturity purchasing approaches for distressed debt investments can be utilized in today's markets.

Hugh F. Kelly, CRE, 2012 CRE vice chair and clinical professor of real estate, New York University Schack Institute of Real Estate, Brooklyn, N.Y., contributed the chapter entitled "Real Estate Investment, Capital Structure." Kelly's chapter focuses on the concept of capital structuring and its consistent reliance on debt financing which, so long as the debt is prudently structured and adequately hedged, can serve as a means of maximizing real estate values for a variety of investor

About the Reviewer

William P.J. McCarthy, CRE, FRICS, CPM, *is a property developer and owner, and a real estate agent and consultant based in Burnaby, British Columbia. McCarthy is a past president of the Real Estate Institute of Canada, and has served as a director and officer of several other professional and community organizations. A Counselor of Real Estate since 1995, he has participated in three major assignments for the CRE Consulting Corps. McCarthy currently chairs the CRE Ethics Committee.*

types. Using detailed mathematics and capital structuring, Kelly shows how various strategies, including hybrid capital structuring can prudently utilize both debt and equity financings.

Scott R. Muldavin, **CRE**, president, The Muldavin Company, Inc., San Rafael, Calif., wrote the chapter "Special Considerations in Sustainable Property Financial Analysis." This chapter is both analytical and topical, as sustainable property investment is increasingly in vogue and will likely remain so going forward. The chapter focuses on the author's six steps towards analyzing and refining the qualitative nature of their research, and which will produce viable results considering the effects of sustainability.

Roy J. Schneiderman, **CRE**, principal, Bard Consulting LLC, San Francisco, co-authored with Dean Altshuler, the chapter entitled "Key Considerations in Joint-Venture Projects." The approach of this chapter focuses on cash flow issues, and their critical importance on various types of joint venture projects including single and multi-asset projects and programmatic joint ventures. With various joint ventures increasingly being utilized, the reader will find their examination of incentive fee structures and how to apply these to basic and complex joint venture configurations very informative.

Kenneth P. Riggs, **Jr.**, **CRE**, the current Counselors of Real Estate Board Chair, who is also chairman and president, Real Estate Research Corp., Chicago, wrote the final chapter entitled "Portfolio Returns and Volatilities Through the Cycles." The article discusses recurring cycles in the market as a whole, and commercial real estate's role within these cycles. This chapter provides an analytical overview as well as strategies to apply when matching the most advantageous real estate portfolio strategy to the current and trending business cycle.

All of these chapters are as to be expected—well researched, written and because of the real world credentials of the authors, insightful and highly applicable. The other chapters also meet this standard. The quality of the research, writing and the reputation of this text's authors is the main strength of this book. The other key is that individual chapters and the articles as a whole are extremely relevant and topical in today's market environment and with regard to future challenges that real estate will continue to face.

You will notice both a scholarly and practical theme in these chapters, and this is consistent throughout the book. The entire text can serve a multitude of purposes, and does so very well. Whether as a detailed introduction to the overall subject, the specific chapters, a refresher for the experienced practitioner, or as an academic text, *Real Estate Mathematics*, is both detailed enough and so very clearly written and presented as to meet all of these needs—something rare for such a comprehensive and often convoluted subject matter as real estate mathematics.

Again, the key to this is that the authors, individually and collectively present their findings from a practical and hands-on perspective. Therefore the "applied" analytics and quantitative methods presented are just that, theory into practice.

Real Estate Mathematics is an attractive book, well designed and printed. The nineteen chapters flow well together, and the use of 119 well crafted and placed figures and tables add clarity to the subject matter. This enables the text to also serve as an ongoing reference guide, and to no doubt be quoted in future publications.

In summary, *Real Estate Mathematics* is a significant addition to this field. Its publication is timely based upon recent events and its quality enhances real estate writing and scholarship. The Counselors can be justifiably proud that our fellow members are part of this effort. This book has earned a spot with my desk library, and I would recommend it for yours as well. ■